Glossary

A	Absorbed dose	The amount of energy deposited by radiation in a given amount of material. The unit of absorbed dose is the rad.
	Accuracy	The closeness of the result of a measurement to the true value of the quantity measured.
	ACEHS	Alameda County Environmental Health Services.
	ACG	Ambient concentration guide.
	Action Level	Defined by regulatory agencies, it is the level of pollutants which, if exceeded, requires regulatory action.
	Alluvium	Sediment deposited by flowing water.
	Alpha particle	A positively charged particle emitted from the nucleus of an atom. It has a mass and charge equal to those of a helium nucleus (two protons and two neutrons).
	Ambient air	The surrounding atmosphere, usually the outside air, as it exists around people, plants, and structures. It is not considered to include the air immediately adjacent to emission sources.
	Analyte	A constituent that is being analyzed.
	ANOVA	Analysis of variance. A test of whether two or more sample means could have been obtained from the same statistical population.
	ANSI	American National Standards Institute.
	Aquifer	A saturated layer of rock or soil below the ground surface that can supply usable quantities of ground water to wells and springs. Aquifers can be a source of water for domestic, agricultural, and industrial uses.
	Aquitard	Isolated water bearing zones.
	ARAR	Applicable, Relevant, and Appropriate Requirement.
	ASME	American Society of Mechanical Engineers.
	AST	Aboveground storage tank.

	ATA	Advanced Test Accelerator.
	Atom	The smallest particle of an element capable of entering into a chemical reaction.
	Atomic absorption spectroscopy	Chemical analysis performed by vaporizing a sample and measuring the absorbance of light by the vapor. Abbreviated AA.
	AVLIS	Atomic Vapor Laser Isotope Separation.
	AWQC	Ambient Water Quality Criteria.
B	BAAQMD	Bay Area Air Quality Management District. The local agency responsible for regulating stationary air emission sources (including the Livermore site) in the San Francisco Bay Area.
	Barcad	Device that samples a discrete water bearing zone in a well.
	BAT	Best Available Technology (economically achievable).
	Beta particle	A negatively charged particle emitted from the nucleus of an atom. It has a mass and charge equal to those of an electron.
	BETX	Benzene, ethyl benzene, toluene, and xylene.
	BMP	Best Management Practice.
	BOD	Biochemical (biological) oxygen demand. A measure of the amount of oxygen in biological processes that break down organic matter in water; a measure of the organic pollutant load. It is used as an indicator of water quality.
	Bq	Becquerel. The SI unit of activity of a radionuclide, equal to the activity of a radionuclide having one spontaneous nuclear transition per second.
C	Cal-EPA	California Environmental Protection Agency.
	CAM	Continuous air monitor.
	CAP88	Computer code required by the EPA for modeling air emissions.
	CARE	Citizens Against a Radioactive Environment.
	CCR	California Code of Regulations.
	CE	Conditionally exempt.

CEQA	California Environmental Quality Act of 1970. CEQA requires that all California state, local, and regional agencies document, consider, and disclose to the public the environmental implications of their actions. CEQA also requires that adverse environmental impacts be mitigated through mitigation measures or project alternatives.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980. Administered by EPA, this program, also known as Superfund, requires private parties to notify the EPA after the release of hazardous substances and undertake short-term removal and long-term remediation. If conditions exist that could create the threat of hazardous substances being released, the Act also requires the remediation of those conditions. In 1986, the Superfund Amendments and Reauthorization Act (SARA) was enacted, which amended and reauthorized CERCLA for five years at a total funding level of $8.5 billion.
CFC	Chlorofluorocarbon.
CFR	Code of Federal Regulations. A codification of all regulations promulgated by federal government agencies.
Chain-of-custody	A method for documenting the history and possession of a sample from the time of its collection, through its analysis and data reporting, to its final disposition.
CHEW	Chemical Exchange Warehouse.
Chlorocarbon	A compound of carbon and chlorine, or carbon, hydrogen, and chlorine, such as carbon tetrachloride, chloroform, and tetrachloroethylene.
CHP	California Highway Patrol.
Ci	Curie. A unit of measurement of radioactivity, defined as the amount of radionuclide in which the decay rate is 2.22×10^{12} disintegrations per minute (3.7×10^{10} disintegrations per second), which is approximately equal to the decay rate of one gram of pure radium.
CL	Concentration limit.
Coliwasa	Collimated water sampler.
Collective dose equivalent	The sums of the dose equivalents of all individuals in an exposed population within a certain radius, expressed in units of person-rem (or person-sievert).

	Collective effective dose equivalent	The sums of the effective dose equivalents of all individuals in an exposed population within a certain radius, and expressed in units of person-rem (or person-sievert).
	Committed dose equivalent	The predicted total dose equivalent to a tissue or organ over a 50-year period after known intake of a radionuclide into the body. It does not include contributions from external dose. Committed dose equivalent is expressed in units of sievert (or rem).
	Committed effective dose equivalent	The sum of the committed dose equivalents to various tissues, each multiplied by the appropriate weighting factor. Committed effective dose equivalent is expressed in units of sievert (or rem).
	Cosmic radiation	Radiation with very high energies, originating outside the earth's atmosphere. Cosmic radiation is one source contributing to natural background radiation.
	CRWQCB	California Regional Water Quality Control Board.
	CSA	Container storage area.
D	Daughter nuclide	A nuclide formed by the radioactive decay of another nuclide, which is called the parent.
	DCG	Derived Concentration Guide. Concentrations of radionuclides in water and air that could be continuously consumed or inhaled (365 days/y) and not exceed the DOE primary radiation protection standard to the public (100 mrem/y effective dose equivalent).
	DCL	Discharge Concentration Limit (City of Livermore Ordinance 13.32).
	1,2-DCA	1,2-dichloroethane.
	DHS	(California) Department of Health Services.
	DLM	Designated Level Methodology.
	DOE	U.S. Department of Energy. The federal agency that is responsible for conducting energy research and regulating nuclear materials used for weapons production.
	Dose	The energy imparted to matter by ionizing radiation. The unit of absorbed dose is the rad, equal to 0.01 joules per kilogram for irradiated material in any medium.

	Dose commitment	The dose which an organ or tissue would receive during a specified period of time (e.g., 50 or 100 years) as a result of intake of one or more radionuclides from one year's release.
	Dose equivalent	The product of the absorbed dose (rad) in tissue and a quality factor. Dose equivalent is expressed in units of rem (or sievert). The dose equivalent to an organ, tissue, or whole body in a year will be that received from the direct exposure plus the committed dose equivalent received from radionuclides taken into the body during the year.
	Dosimeter	A portable detection device for measuring the total accumulated exposure to ionizing radiation.
	Dosimetry	The theory and application of the principles and techniques involved in the measurement and recording of radiation doses. Its practical aspect is concerned with the use of various types of radiation measurement instruments.
	DOT	U.S. Department of Transportation.
	DRB	Drainage Retention Basin.
	DTSC	California Environmental Protection Agency, Department of Toxic Substances Control.
	DUS	Donation Utilization and Sales (Group).
E	EA	Environmental Assessment. An environmental review document that identifies environmental impacts from any federally approved or funded project. If an EA shows significant impact, an EIS is required.
	EDE	Effective dose equivalent. An estimate of the total risk of potential effects from radiation exposure. It is the sum of the committed effective dose equivalent from internal deposition and the effective dose equivalent from external penetrating radiation received during a calendar year. The committed effective dose equivalent is the sum of the individual organ committed dose equivalents multiplied by weighting factors that represent the proportion of the total random risk that each organ would receive from uniform irradiation of the whole body.
	EDO	Environmental Duty Officer.
	EE/CA	Engineering evaluation/cost analysis.
	EFA	East Firing Area (LLNL Site 300).

Effluent	A liquid or gaseous waste discharged to the environment.
EIR	Environmental Impact Report. A detailed report, required by the California Environmental Quality Act, on the environmental impacts from any action carried out, approved, or funded by a California state, regional, or local agency.
EIS	Environmental Impact Statement. A detailed report, required by the National Environmental Policy Act, on the environmental impacts from a federally approved or funded project. An EIS must be prepared by a federal agency when a "major" federal action that will have "significant" environmental impacts is planned.
ELAP	Environmental Laboratory Accreditation Program.
EMAD	Environmental Monitoring and Analysis Division (LLNL).
EML	U.S. Department of Energy Environmental Measurements Laboratory.
EMS	Environmental Monitoring Section in the Environmental Monitoring and Analysis Division of the Environmental Protection Department (at LLNL).
EMSL	Environmental Monitoring Systems Laboratory.
EPA	Environmental Protection Agency. The federal agency responsible for enforcing federal environmental laws. Although some of this responsibility may be delegated to state and local regulatory agencies, EPA retains oversight authority to ensure protection of human health and the environment.
EPCRA	Emergency Planning and Community Right-to-Know Act.
EPD	Environmental Protection Department (LLNL).
ERD	Environmental Restoration Division of the Environmental Protection Department at LLNL.
ES&H	Environmental, Safety, and Health.
Evapotranspiration	Transferring water from the soil to the air by plants that take the water up through their roots and give it off through their leaves and other above-ground tissue.
EWTF	Explosives Waste Treatment Facility.

F	Federal facility	A facility that is owned or operated by the federal government. Federal facilities are subject to the same requirements as other responsible parties once placed on the Superfund National Priorities List.
	Federal Register	A document published daily by the federal government containing notification of government agency actions. The Federal Register contains notification of EPA and DOE actions, including notification of EPA and DOE decisions concerning permit applications and rule-making.
	FFA	Federal Facility Agreement. A negotiated agreement that specifies required actions at a federal facility as agreed upon by various agencies (e.g., EPA, DHS, RWQCB, and DOE).
	FFCA	Federal Facilities Compliance Agreement.
	FHC	Fuel hydrocarbon.
	FONSI	Finding of No Significant Impact.
	Freon-113	1,1,2-trichloro-1,2,2-trifloroethane.
	FS	Feasibility Study. A study based on a Remedial Investigation to evaluate and develop remedial action alternatives to prevent, or mitigate, the migration or release of hazardous substances or contaminants.
G	g	Gram. The standard metric measure of weight approximately equal to 0.035 ounce.
	Gamma ray	High-energy, short-wavelength electromagnetic radiation emitted from the nucleus of an atom. Gamma radiation frequently accompanies the emission of alpha or beta particles.
	GSA	General Services Area.
	GWP	Ground Water Project.
	Gy	Gray. The SI unit of measure for absorbed dose. It is the quantity of energy imparted by ionizing radiation to a unit mass of matter such as tissue. One gray corresponds to one joule per kilogram and equals 100 rads.
H	Half-life (radiological)	The time required for one-half the radioactive atoms in a given amount of material to decay. After one half-life, 50 out of 100 atoms (on average) will have decayed; during the next half-life, 25 more will decay, and so on, exponentially.

	Hazardous waste	Wastes exhibiting any of the following characteristics: ignitability, corrosivity, reactivity, or EP-toxicity (yielding toxic constituents in a leaching test). In addition, EPA has listed as hazardous other wastes that do not necessarily exhibit these characteristics. Although the legal definition of hazardous waste is complex, the term more generally refers to any waste that EPA believes could pose a threat to human health and the environment if managed improperly.
	HCAL	Hazards Control Department Analytical Laboratory.
	HCD	Hazards Control Department.
	HE	High explosives. Materials that release large amounts of energy when detonated.
	HEPA	High-efficiency particulate air (filter).
	HF	Hydrogen fluoride.
	HMX	Cyclotetramethyltetramine, a high-explosive compound.
	HPGe	High-purity germanium.
	HT	Tritiated hydrogen gas. Tritium is the hydrogen isotope with one proton and two neutrons in the nucleus. It emits a low-energy beta particle and has a half-life of 12.3 years.
	HTO	Tritiated water and water vapor (see HT).
	HWCA	California Hazardous Waste Control Act. This legislation specifies requirements for the management of hazardous wastes in California.
	HWM	Hazardous Waste Management Division (LLNL).
	Hydraulic gradient	In an aquifer, the rate of change of total head (water-level elevation) per unit distance of flow at a given point and in a given direction.
	Hydrology	The science dealing with the properties, distribution, and circulation of natural water systems.
I	ICRP	International Commission on Radiological Protection. An international organization that studies radiation, including its measurement and effects.

	Inorganic compounds	Compounds that either do not contain carbon or do not contain hydrogen along with carbon. Inorganic compounds include metals, salts, and various carbon oxides (carbon monoxide, carbon dioxide).
	In situ	A term that can be used to refer to the treatment of contaminated areas without excavation or other removal, as in the *in situ* treatment of soils through biodegradation of contaminants on site.
	Interim status	A legal classification that applies to hazardous waste incinerators or other hazardous waste management facilities that were under construction or in operation by November 19, 1980, and can meet other interim status requirements. Interim status facilities may operate while EPA considers their permit application.
	IQR	Interquartile range.
	Isotopes	Forms of an element having the same number of protons in their nuclei but differing numbers of neutrons.
L	L	Liter. The SI measure of capacity approximately equal to 1.057 quart.
	Land Ban	A regulatory program that identifies hazardous wastes that are restricted from land disposal. The regulations incorporate a phasing-in of restrictions in three stages.
	LEDO	Laboratory Emergency Duty Officer. A senior LLNL management official with authority to commit LLNL resources on the behalf of the Director during an emergency.
	Less than detection limits	A phrase indicating that a chemical constituent was either not identified or not quantified at the lowest level of sensitivity of the analytical method being employed by the laboratory. Therefore, the chemical constituent either is not present in the sample, or it is present in such a small concentration that it cannot be measured by the analytical procedure.
	LLNL	Lawrence Livermore National Laboratory.
	LLW	Low-level waste.
	LOS	Limit of sensitivity (detectability).
	Lower limit of detection	The smallest concentration or amount of analyte that can be detected in a sample at a 95% confidence level.

	LWRP	Livermore Water Reclamation Plant. The City of Livermore's municipal wastewater treatment plant, which accepts discharges from the LLNL Livermore site.
M	MAD	Median absolute deviation. The median of the differences of all data values from the median.
	MCL	Maximum contaminant level in drinking water established by EPA or DTSC.
	MDL	Minimum detection limit.
	MEI	Maximally exposed individual member of the public.
	mR	Milliroentgen. A unit of measurement used to express radiation exposure.
	mrem	Millirem. A unit of measurement used to express radiation dose to a person—equal to 0.00001 sievert.
	msl	Mean Sea Level. The average sea surface level for all stages of the tide over a 19-year period. This is usually determined by hourly height readings from a fixed reference level.
	mSv	Millisievert. A unit of measurement used to express radiation dose to a person—equal to 0.001 sievert.
	MWMF	Mixed Waste Management Facility.
N	NAAQS	National Ambient Air Quality Standards. Air standards established pursuant to the Clean Air Act to protect human health and the environment.
	NCR	Nonconformance Reports.
	NCRP	National Council on Radiation Protection.
	NEPA	National Environmental Policy Act. This federal legislation, enacted in 1969, requires all federal agencies to document and consider environmental impacts from federally funded or approved projects. DOE is responsible for NEPA compliance at LLNL.
	NESHAPs	National Emission Standards for Hazardous Air Pollutants. These standards are found in the Clean Air Act and set limits for arsenic, asbestos, beryllium, mercury, radionuclides, vinyl chloride, benzene, etc.

	NIST	National Institute for Standards and Technology. The federal agency, formerly known as the National Bureau of Standards, responsible for reference materials against which laboratory materials are calibrated.
	NOD	Notice of Deficiency.
	NOI	Notice of Intent.
	Nonpoint source	Any nonconfined area from which pollutants are discharged into a body of water (e.g., agricultural runoff, construction runoff, and parking-lot drainage).
	NOV	Notice of Violation.
	NO_X	Nitrogen oxides.
	NPDES	National Pollutant Discharge Elimination System. This federal regulation, under the Clean Water Act, requires permits for discharges into surface waterways.
	NPDES General Permit	National Pollutant Discharge Elimination System General Industrial Activities Storm Water Permit.
	NPL	National Priorities List. EPA's list of the top-priority hazardous waste sites in the country that are subject to the Superfund program.
	NRC	Nuclear Regulatory Commission. The federal agency charged with oversight of nuclear power and nuclear machinery and applications not regulated by DOE or the Department of Defense.
	NTS	Nevada Test Site (DOE). The facility in the United States where nuclear weapons are tested.
	Nuclide	A species of atom characterized by the constitution of its nucleus. The nuclear constitution is specified by the number of protons, number of neutrons, and energy content; or, alternatively, by the atomic number, mass number, and atomic mass. To be regarded as a distinct nuclide, the atom must be capable of existing for a measurable length of time.
O	Off site	Outside the boundaries of the LLNL Livermore site and Site 300 properties.
	On site	Within the boundaries of the LLNL Livermore site or Site 300 properties.
	ORAD	Operations and Regulatory Affairs Division (LLNL).

	OSHA	Occupational Safety and Health Act.
	OSP	Operational Safety Procedure.
P	Part B permit	The second, narrative section submitted by generators in the RCRA permitting process. It covers in detail the procedures followed at a facility to protect human health and the environment.
	PCB	Polychlorinated biphenyl.
	PCE	Tetrachloroethylene (or perchloroethylene).
	pCi	Picocuries. A unit of radioactivity—equal to 1 Ci $\times 10^{-12}$, or 3.7 $\times 10^{-2}$ disintegrations per second.
	Performance standards	Specific regulatory requirements established by EPA limiting the concentrations of designated organic compounds, particulate matter, and hydrogen chloride in incinerator emissions.
	Piezometer	Generally, a small-diameter, nonpumping well used to measure the elevation of the water table or potentiometric surface.
	pH	A measure of hydrogen-ion concentration in an aqueous solution. Acidic solutions have a pH from 0 to 6, basic solutions have a pH greater than 7, and neutral solutions have a pH of 7.
	Point source	Any confined and discrete conveyance (e.g., pipe, ditch, well, or stack).
	ppb	Parts per billion. A unit of measure for the concentration of a substance in its surrounding medium. For example, one billion grams of water containing one gram of salt has a salt concentration of one part per billion.
	ppm	Parts per million. A unit of measure for the concentration of a substance in its surrounding medium. For example, one million grams of water containing one gram of salt has a salt concentration of one part per million.
	Pretreatment	Any process used to reduce a pollutant load before it enters the sewer system.
	Pretreatment regulations	National wastewater pretreatment regulations, adopted by EPA in compliance with the 1977 amendments to the Clean Water Act, which required that EPA establish pretreatment standards for existing and new industrial sources.

	Priority pollutants	A set of organic and inorganic chemicals identified by EPA as indicators of environmental contamination.
	Public comment period	A specified amount of time allowed for members of the public to express their views and concerns regarding an action by a public agency.
	Public hearing	A formal gathering of officials and the public where the views and concerns of members of the public are verbally expressed regarding a public agency's action; public comments may be written or oral. The agency is required to consider the comments in its evaluation of the action being taken.
	Public notice	Notification by an agency informing the public of agency actions (e.g., the issuance of a draft permit).
Q	QA	Quality assurance. A system of activities whose purpose is to provide the producer or user of a product or service the assurance that it meets defined standards of quality with a stated level of confidence.
	QC	Quality control. Procedures used to verify that prescribed standards of performance are attained.
	Quality factor	The factor by which the absorbed dose (rad) is multiplied to obtain a quantity that expresses, on a common scale for all ionizing radiation, the biological damage to exposed persons. It is used because some types of radiation, such as alpha particles, are more biologically damaging than others.
R	R	Roentgen. A unit of exposure dose of x- or gamma-radiation such that the electrons and positrons liberated by this radiation produce, in air, when stopped completely, ions carrying positive and negative charges of 2.58×10^{-4} coulomb per kilogram of air.
	rad	The unit of absorbed dose. It is the quantity of energy imparted by ionizing radiation to a unit mass of matter such as tissue. One rad equals 0.01 joule per kilogram.
	Radioactive decay	The spontaneous transformation of one radionuclide into a different radioactive or nonradioactive nuclide, or into a different energy state of the same radionuclide.
	Radioactivity	The spontaneous emission of radiation, generally alpha or beta particles, or gamma rays, from the nucleus of an unstable isotope.
	Radionuclide	An unstable nuclide. See nuclide and radioactivity.

RAIP	Remedial Action Implementation Plan.
RAS	Radiation Analytical Sciences (Laboratory).
RCRA	Resource Conservation and Recovery Act of 1976. RCRA is a program of federal laws and regulations that govern the management of hazardous wastes. RCRA is applicable to all entities that manage hazardous wastes.
RDX	Hexahydro-1,3,5-trinitro-1,3,5-triazine, a high-explosive compound.
rem	Radiological unit of dose equivalent. This is the product of the absorbed dose (rad), quality factor (Q), distribution factor, and other necessary modifying factors. The unit rem describes the effectiveness of various radiations to produce biological effects (1 rem = 0.01 sievert).
Response to comments	A document that addresses all significant public comments received by EPA during the public comment period on a proposed permit or action. The document includes a summary of each comment, as well as EPA's response to each comment.
RI	Remedial Investigation. An investigation conducted to fully assess the nature and extent of the release, or threat of release, of hazardous substances, pollutants, or contaminants and to gather necessary data to support the corresponding feasibility study.
Risk assessment	The use of established methods to measure the risks posed by an activity such as hazardous waste treatment. Risk assessments evaluate (1) the relationship between exposure to toxic substances and the subsequent occurrence of health effects, and (2) the potential for that exposure.
RML	Radiological Measurements Laboratory.
RMMA	Radioactive materials management areas.
ROD	Record of Decision.
ROG	Reactive organic emissions.
ROV	Report of Violation.
RPF	Rapid Prototype Facility.
RSD	Relative standard deviation.

	RWQCB	Regional Water Quality Control Board. The California regional agency responsible for water quality standards and the enforcement of state water quality laws within its jurisdiction. California is divided into a number of RWQCBs; the Livermore site is regulated by the San Francisco Bay Region, and Site 300 is regulated by the Central Valley Region.
S	SAL	State Action Level. See Action Level.
	Sampling and Analysis Plan	A detailed document describing the procedures used to collect, handle, and analyze groundwater samples for detection or assessment-monitoring parameters. The plan details quality control measures that will be implemented to ensure that sample-collection, analysis, and data-presentation activities meet the prescribed requirements.
	Sandia, California	Sandia National Laboratories, California.
	SARA	Superfund Amendments and Reauthorization Act of 1986. This act modifies and reauthorizes CERCLA. Title III of this act is also known as the Emergency Planning and Community Right-to-Know Act of 1986.
	Saturated zone	A subsurface zone below which all rock pore-space is filled with water; also called the phreatic zone.
	Sensitivity	The capability of methodology or instrumentation to discriminate between samples having differing concentrations or containing varying amounts of analyte.
	Sewerage	The system of sewers.
	SI	*Système International d'Unités*. An international system of physical units. Units of measure in this system include meters (length), kilogram (mass), kelvin (temperature), becquerel (radioactivity), gray (radioactive dose), and sievert (dose equivalent).
	Site 300	LLNL's high-explosives test facility, located approximately 24 kilometers east of the Livermore site.
	SDM	Standard deviation of the mean. (See standard deviation.)
	SJCHD	San Joaquin County Health District. The local agency that enforces underground-tank regulations in San Joaquin County, including Site 300.
	SJCPHS	San Joaquin County Public Health Services.

	SJVUAPCD	San Joaquin Valley Unified Air Pollution Control District. The local agency responsible for regulating stationary air emission sources (including Site 300) in San Joaquin County.
	STLC	Soluble Threshold Limit Concentration. A value that can be used to determine if a waste is hazardous.
	Superfund	The common name used for the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). California has also established a "State Superfund" under provisions of the California Hazardous Waste Control Act.
	Surface impoundment	A facility or part of a facility that is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials, although it may be lined with man-made materials. The impoundment is designed to hold an accumulation of liquid wastes, or wastes containing free liquids, and is not an injection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds, and lagoons.
	Sv	Sievert. The SI unit of dose equivalent. This is the product of the absorbed dose (gray), quality factor (Q), distribution factor, and other necessary modifying factors. The unit Sv describes the effectiveness of various radiations to produce biological effects; 1 Sv = Gy $\times$ Q $\times$ N = 100 rem.
	SW-MEI	Sitewide maximally exposed individual member of the public.
	SWPPP	Storm Water Pollution Prevention Plan.
T	T-BOS	Tetra-butylorthosilicate.
	TCE	Trichloroethene.
	TDS	Total Dissolved Solids. The portion of solid material in a waste stream that is dissolved and passed through a filter.
	TFA	Treatment Facility A.
	TFB	Treatment Facility B.
	TFC	Treatment Facility C.
	TFD	Treatment Facility D.
	TFF	Treatment Facility F.

	TLD	Thermoluminescent dosimeter. A device used to measure external gamma radiation levels.
	TNT	Trinitrotoluene.
	TOC	Total organic carbon. The sum of the organic material present in a sample.
	TOX	Total organic halides. The sum of the organic halides present in a sample.
	TPH	Total petroleum hydrocarbons.
	TPH-D	Total petroleum hydrocarbons-diesel.
	Tritium	Tritium is the hydrogen isotope with one proton and two neutrons in the nucleus. It emits a low-energy beta particle and has a half-life of 12.3 years.
	TRU	Transuranic waste.
	TSCA	Toxic Substances Control Act. The law governing the manufacture, processing, and use of chemical substances.
	TSS	Total suspended solids.
	TTO	Total toxic organic compounds. A list of organic compounds for which EPA has established discharge limits for specific processes or industries.
	TTU	Transportable Treatment Unit.
U	UC	University of California.
	Unsaturated zone	That portion of the subsurface in which the pores are only partially filled with water. The direction of water flow is vertical in this zone; which is also referred to as the vadose zone.
	USGS	U.S. Geological Survey. The federal agency responsible for maintaining maps of the United States.
	UST	Underground storage tank. A stationary device designed to contain an accumulation of hazardous materials or waste. A tank is constructed primarily of nonearthen material, but the entire surface area of the tank is totally below the surface of, and covered by, the ground.

V	Vadose zone	The partially saturated or unsaturated region above the water table that does not yield water to wells.
	VHS	Volatile halogenated solvent. A term used by LLNL for analysis of the solvents detectable by EPA Method 601.
	VOC	Volatile organic compound. Liquid or solid organic compounds that have a tendency to spontaneously pass into the vapor state.
	VSI	Visual Site Inspection. An inspection required by EPA as part of the RCRA permit process to identify solid waste management units that could have had, or continue to have, releases of hazardous constituents to the environment.
W	WAA	Waste accumulation area. An officially designated area that meets current environmental standards and guidelines for temporary (less than 90 days) storage of hazardous waste before pickup by the Hazardous Waste Management Division for off-site disposal.
	WFA	West Firing Area (LLNL Site 300).
	Wastewater treatment system	A collection of treatment processes and facilities designed and built to reduce the amount of suspended solids, bacteria, oxygen-demanding materials, and chemical constituents in wastewater.
	Water table	The water-level surface below the ground at which the unsaturated zone ends and the saturated zone begins. It is the level to which a well that is screened in the unconfined aquifer would fill with water.
	WDR	Waste Discharge Requirements. Issued by the California Regional Water Quality Control Board.
	Weighting factor	A value used to calculate dose equivalents. It is tissue-specific and represents the fraction of the total health risk resulting from uniform, whole-body irradiation that could be contributed to that particular tissue. The weighting factors used in this report are recommended by the ICRP (Publication 26).
	Wind rose	A diagram that shows the frequency and intensity of wind from different directions at a particular place.
	WMP	Waste Minimization Project.
	WPAA	Workplace accumulation area.

Z Zone 7

The common name for the Alameda County Flood Control and Water Conservation District. Zone 7 is the water management agency for the Livermore-Amador Valley with responsibility for water treatment and distribution. Zone 7 is also responsible for management of agricultural and surface water and the ground water basin.